*Via Facsimile: (703) 872-9306*

9D-RG-19587
PATENT

**Remarks**

The Office Action mailed October 8, 2003, has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-28 are now pending in this application. Claims 1-28 stand rejected. Claims 29-34 have been canceled. Claim 2 has not been canceled.

The rejection of Claims 1-14 and 17-28 under 35 U.S.C. § 103 as being unpatentable over Larson in view of Westerberg et al. ("Westerberg") (US Re. 36,724) or in view of Shin (US 6,005,235) is respectfully traversed.

Larson describes a combination electric convection and microwave oven 10 having an oven cavity 12, an electrical resistance heater 17, a magnetron 18, a dual-end blower 19, and a control panel 20 surrounded by a cabinet 14. Dual-end blower 19 is located on the side of oven cavity 12 and draws air from cavity 12 through holes 11 and distributes the air back to cavity 12. The control panel includes of an oven cycle timer 22, "START", "STOP", and "LIGHT" push buttons numbered 24, 26, and 28, respectively, a temperature sensing probe controls 30, a variable power controls 32 for controlling the ratio of microwave energy to thermal energy applied to the oven cavity when in the "COMBINATION" and "MICROWAVE" modes, a cooking method controls 34, and a convection heater temperature level controls 36. Notably, Larson is silent with respect to a convection fan positioned to direct air over at least one radiant heat source and into the cooking cavity.

Westerberg describes an oven that includes lower radiation heating lamps 16 and upper radiation heating lamps 18. Lamps 16 and 18 produce very high intensity visible and infrared radiation. The oven also includes an inner wall 12 with a high polished, poorly absorptive surface that it is very reflective to the wide spectrum of wavelengths from the radiant lamps. The use of both high intensity visible and infrared radiation provides a very rapid method of high-

quality cooking and baking. Notably, Westerberg is silent with respect to a convection fan positioned to direct air over at least one radiant heat source and into the cooking cavity.

Shin describes a cooling apparatus for cooling lighting lamps installed in a microwave oven. The oven includes an upper lighting lamp 10 and a lower light lamp 12. Lamps 10, 12 are mounted on an upside 4 and a downside 6 within the oven cavity. Cooling fans 20, 22 supply airflow for cooling lamps 10, 12. The airflow from cooling fans 20, 22 goes towards the inner part of the oven from its outer part, thereby primarily cooling the light lamps. Notably, Shin is silent with respect to a convection fan positioned to direct air over at least one radiant heat source and into the cooking cavity

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Larson according to the teachings of Westerberg and/or Shin. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Larson, Westerberg, and Shin, alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Larson with Westerberg and/or Shin because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Only the conclusory statement that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Larson to use lamps as radiant heat sources above and below the food to be heated for more uniform and speedy cooking result, in view of the teaching of Westerberg or Shin" suggests combining the disclosures. Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, none of Larson, Westerberg, and Shin, alone or in combination, describe or suggest an upper heater module including at least one

radiant heat source and a convection fan positioned to direct air over at least one radiant heat source and into the cooking cavity.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Specifically, the Examiner has not pointed to any prior art that teaches or suggests a reasonable expectation of success or motivation in combining the disclosures, other than Applicants' own teaching.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Larson is cited for an oven having a cooking cavity and a plurality of modules for delivering energy into the cavity, and Westerberg and Shin are cited for the use of upper and lower heat sources. Since there is no teaching, suggestion, or motivation in the cited art for the claimed combination, the Section 103 rejection appears to be clearly based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and

for this reason alone, Applicants request that the Section 103 rejection of Claims 1-14, and 17-28 be withdrawn.

Further, and to the extent understood, none of Larson, Westerberg, and Shin, considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 1 recites an oven including "a cooking cavity... an RF generation module for delivering microwave energy into said cooking cavity...an upper heater module comprising at least one radiant heat source and a convection fan positioned to direct air over said at least one radiant heat source and into said cooking cavity...a lower heater module...and a control operatively connected to said RF generation module, said upper heater module, and said lower heater module for selective control thereof".

None of Larson, Westerberg, and Shin, alone or in combination, describe or suggest an oven including a cooking cavity, an RF generation module for delivering microwave energy into the cooking cavity, an upper heater module comprising at least one radiant heat source and a convection fan positioned to direct air over the at least one radiant heat source and into the cooking cavity, a lower heater module, and a control operatively connected to the RF generation module, the upper heater module, and the lower heater module for selective control thereof. Rather, Larson and Westerberg each describe a fan blower system positioned away from the energy sources and configured to redirect cavity back into the cavity and Shin describes a system for cooling the energy source. Accordingly, for at least the reason set forth above, Claim 1 is submitted to be patentable over Larson in view of Westerberg and/or Shin.

Claims 2-14 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-14 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-14 likewise are patentable over Larson in view of Westerberg and/or Shin.

Claim 17, recites an oven including "a cooking cavity...a plurality of modules for delivering energy into said cooking cavity, said energy comprising radiant energy, microwave energy, and thermal energy...a convection fan positioned to direct air over at least one of said plurality of modules and into said cooking cavity...and a control operatively connected to said modules for controlling delivery of energy to said cooking cavity, said control configured to operate said modules in a microwave cooking mode, a convection / bake cooking mode, and a speedcook mode".

None of Larson, Westerberg, and Shin, alone or in combination, describe or suggest an oven including a cooking cavity, a plurality of modules for delivering energy into the cooking cavity, the energy including radiant energy, microwave energy, and thermal energy, a convection fan adjacent at least one of the plurality of modules and configured to direct air over at least one of the plurality of modules and into the cooking cavity and a control operatively connected to the modules for controlling delivery of energy to the cooking cavity, the control configured to operate the modules in a microwave cooking mode, a convection / bake cooking mode, and a speedcook mode. Rather, Larson and Westerberg each describe a fan blower system positioned away from the energy sources and configured to redirect cavity back into the cavity and Shin describes a system for cooling the energy source. Accordingly, for at least the reason set forth above, Claim 17 is submitted to be patentable over Larson in view of Westerberg and/or Shin.

Claims 18-28 depend, directly or indirectly, from independent Claim 17. When the recitations of Claims 18-28 are considered in combination with the recitations of Claim 17, Applicants submit that dependent Claims 18-28 likewise are patentable Larson in view of Westerberg and/or Shin.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-14 and 17-28 be withdrawn.

The rejection of Claims 15 and 16 under 35 U.S.C. § 103 as being unpatentable over Larson in view of Westerberg or Shin as applied to claims 1-14 and 17-28, and further in view of

McKee et al. ("McKee") (US 6,060,701) or in view of Ishifuro et al. ("Ishifuro") (US 4,831,225) is respectfully traversed.

Larson, Westerberg and Shin are described above.

McKee describes an oven 10 including a housing 14, a cooking chamber 16 which is adapted to receive a food product 12 for cooking, and a conduit 20 for selectively providing gaseous communication external to the cooking chamber, between the bottom and top of the cooking chamber. Operation of a thermal energy source 25 may be controlled by a control means 250 which includes a thermostat and a cutoff switch which cuts off power to the thermal energy source under at least two conditions. In the first condition, the power supply is being used for the magnetron or hot air blower, and there is insufficient power to enable magnetron 100. hot air blower motor 40a and heating means to be simultaneously operated. In the second condition, either the actual temperature of the thermal energy source or the actual temperature of the air entering the cooking chamber exceeds a "set" temperature. To this end, the thermal energy source and the entry to the cooking chamber are preferably provided with separate temperature-sensing mechanisms 30 and 30' (such as a thermocouple or resistive thermal device) positioned so as to measure the temperature of the air at these critical points.

Ishifuro describes a control panel having thereon a key for selecting the desired cooking mode from various modes such as heater cooking and microwave cooking, various function keys, numeric keys for setting a cooking temperature and cooking time, a start key for starting a cooking operation and a display. Element 2 is a control device such as a micro processor (MPU) that controls the operation of the microwave oven. Element 3 is a power supply source which controls power supply to a microwave generating device 4 such as a magnetron as heating means for the microwave oven, a heater cooking device 5 and a blower 6 according to a control signal from the control device. Element 7 is temperature sensor means such as a thermistor which detects the heating chamber temperature. Element 8 is a damper that opens or closes due to the shape memory effect of a shape memory alloy. When the temperature in the heating chamber

rises, the shape memory alloy resumes its memorized shape due to the heat, allowing the damper to c ose the blowhole provided for supplying ventilating air from the blower to the heating chamber.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Larson according to the teachings of Westerberg, Shin, Mckee and/or Ishifuro. More specifically, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Larson, Westerberg, Shin, McKee, and Ishifuro, alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Larson with Westerberg, Shin, McKee, and/or Ishifuro because there is no motivation to combine the references suggested in the art. Rather, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Only the conclusory statement that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Larson to provide a temperature sensing system to monitor the temperature of the cooking cavity to feedback control the operation of the oven components such as, the heater, the microwave source and/or the blower for more precise heating control and better cooking result, in view of the teaching of McKee or Ishifuro" suggests combining the disclosures. Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, none of Larson, Westerberg, Shin, McKee, and Ishifuro, considered alone or in combination, describe or suggest an upper heater module including at least one radiant heat source and a convection fan positioned to direct air over at least one radiant heat source and into the cooking cavity.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte

Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Specifically, the Examiner has not pointed to any prior art that teaches or suggests a reasonable expectation of success or motivation in combining the disclosures, other than Applicants' own teaching.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Larson is cited for an oven having a cooking cavity and a plurality of modules for delivering energy into the cavity, and Westerberg and Shin are cited for the use of an upper and lower energy source, McKee is cited for a temperature sensing sensor to control the operation of the thermal energy source, and Ishifuro is cited for a temperature sensor to sense the oven air temperature. Since there is no teaching, suggestion, or motivation in the cited art for the claimed combination, the Section 103 rejection appears to be clearly based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 15 and 16 be withdrawn.

Further, and to the extent understood, none of Larson, Westerberg, Shin, McKee, and Ishifuro considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 15 and 16 depend from Claim 1 which recites an oven including "a cooking cavity...an RF generation module for delivering microwave energy into said cooking cavity...an upper heater module comprising at least one radiant heat source and a convection fan positioned to direct air over said at least one radiant heat source and into said cooking cavity...a lower heater module...and a control operatively connected to said RF generation module, said upper heater module, and said lower heater module for selective control thereof".

None of Larson, Westerberg, Shin, McKee, and Ishifuro, alone or in combination, describe or suggest an oven including a cooking cavity, an RF generation module for delivering microwave energy into the cooking cavity, an upper heater module comprising at least one radiant heat source and a convection fan positioned to direct air over the at least one radiant heat source and into the cooking cavity, a lower heater module, and a control operatively connected to the RF generation module, the upper heater module, and the lower heater module for selective control thereof. Rather, Larson and Westerberg each describe a fan blower system positioned away from the energy sources and configured to redirect cavity back into the cavity, Shin describes a system for cooling the energy source, and Mckee and Ishifuro describe temperature sensors. Accordingly, for at least the reason set forth above, Claim 1 is submitted to be patentable over Larson in view of Westerberg, Shin, McKee, and/or Ishifuro.

Claims 15 and 16 depend from independent Claim 1. When the recitations of Claims 15 and 16 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 15 and 16 likewise are patentable over Larson in view of Westerberg, Shin, McKee, and/or Ishifuro.

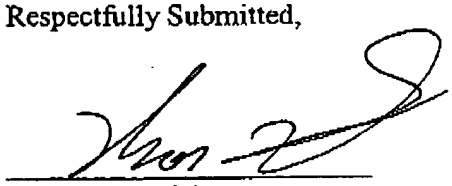
For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 15 and 16 be withdrawn.

*Via Facsimile: (703) 872-9306*

9D-RG-19587
PATENT

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



Thomas M. Fisher
Registration No. 47,564
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070



PAGE 20/20 * RCVD AT 1/8/2004 7:04:55 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID: * DURATION (mm-ss):04-46